

**ABSTRACT**

A method for the modification of an inner surface in each of one, two or more microchannel structures of a microfluidic device. Each of the microchannel structures comprises one, two or  
5 more ports (PT) communicating with ambient atmosphere. The microconduit part comprises the inner surface to be modified. The method comprises for each microchannel structure the steps of:

- (I) filling the microconduit part with a liquid containing a surface modification agent through at least one port (PT') of said one, two or more ports (PT),
- 10 (II) incubating said liquid within said microconduit part, and
- (III) removing said liquid from said microconduit part, for instance from the microchannel structures comprising said microconduit part.

The method is characterized in that reduced pressure is utilized for filling in step (I).

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